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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/723,846 | 11/26/2003 | Dean Foote | LAMA122071 | 9688 |

26389 7590 02/18/2005

CHRISTENSEN, O'CONNOR, JOHNSON, KINDNESS, PLLC
1420 FIFTH AVENUE
SUITE 2800
SEATTLE, WA 98101-2347

EXAMINER

PATEL, VISHAL A

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

3676

DATE MAILED: 02/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,846

Applicant(s)

FOOTE ET AL.

Examiner

Vishal Patel

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Morris (US.

3,144,162).

Morris discloses a seal configuration comprising a body (10) adapted to contain internal pressure (pressure in opening 11) having an opening with inwardly tapered peripheral sidewall (tapered wall where seal 22 contacts). A closure (13) adapted to close the opening, the closure having an attachment portion larger than the opening (this is the case since the opening is closed by the closure having 16) and an axially projecting stopper (portion of 13 after 16) having an endless peripheral seal groove (groove 17 having 22 and 19) extending in spaced relation around the axis in which is positioned a peripheral seal adapted to sealingly engage the tapered peripheral sidewall of the body in interference fit relation, thereby conforming to the tapered peripheral sidewall (the seal 22 conforms to the tapered sidewall).

A backing ring (19) of pliable memory retaining material positioned between the peripheral seal groove and the attachment portion of the closure. The backing ring engaging the tapered peripheral sidewall of the body in interference fit relation and conforming to the tapered peripheral sidewall while being sufficiently stiff as to resist extrusion flow under pressure (this is the case since 19 is an anti-extrusion ring), such that when the peripheral seal deforms (as seen in

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figure 2 the seal 22 deforms) in response to an increase in internal pressure within the body and extrusion gaps begin to form between the attachment portion of the closure and the body, the peripheral seal is extruded against the backing ring (the ring 19 expands), that portion of the backing ring engaging the tapered peripheral side wall of the body plastically deforming by changing shape and applying sealing pressure (method limitation given no patentable weight in an apparatus claim) at the extrusion gap to prevent the peripheral seal from entering the extrusion gaps.

Even if this limitation is considered the, as explained by the reference that the material if of low modulus of elasticity and hence a flat surface may be used instead of a tapered surface, which implies that the flat surface will or may deform to form the tapered surface (column 2, lines 70-72).

Response to Arguments

3. Applicant's arguments filed 11/15/04 have been fully considered but they are not persuasive.

Applicants argument that Morris does use the term deform but does not say that the deformation is plastic, applicant assumes elastic deformation because Morris uses bronze which has a modulus of elasticity lower than steel, which the pressure vessel is made of. This is not persuasive because using lower modulus material is to prevent damage to the pressure vessel when the anti-extrusion ring is expanded plastically or elastically, since replacing the anti-extrusion ring is cheaper than replacing the pressure vessel.

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Furthermore the reason for compression of the anti-extrusion ring is to provide reduce stress on the anti-extrusion ring by the large pressure (100,000 psi) applied on the anti-extrusion ring.

Furthermore applicant argument that the deformation is not plastic is not persuasive because Morris teaches all the structural limitations of the claim.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford, can be reached on (703) 308-2978.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer

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Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.

Any response to this action should be mailed to:


Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: 703-872-9326, for formal communications for entry before Final action: or,
703-872-9327, for formal communications for entry after Final action.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive, Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP

February 15, 2005


ALISON PICKARD
Primary Patent Examiner
Tech. Center 3600